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10/646,323	08/22/2003	Mark Smolenski	00601-0044US	9692

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WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
500 W. MADISON STREET  
SUITE 3800  
CHICAGO, IL 60661

EXAMINER
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RODRIGUEZ, RUTH C

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/646,323

Applicant(s)

SMOLENSKI ET AL.

Examiner

Ruth C Rodriguez

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-25 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it exceeds 150 words.

Correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 12-14, 17 and 19-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishimura et al. (US 5,926,910).

In combination, a first tubular element (21) and a second tubular element (31). The first tubular element has a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly at a first circumferentially facing surface (C. 4, L. 45-65). The second tubular element has a second portion with a second axis, a radially inwardly facing surface and a second connecting assembly (33) with a second circumferentially facing surface. The first portion extends within the second portion so that the radially inwardly facing surface on the second tubular element surrounds the radially outwardly facing surface on the first tubular element (Fig. 1). The first and second tubular elements positionable in a first relative axial position wherein relative movement of the first and second tubular elements around the first and second axes between a first relative rotational position and a second relative rotational position causes the first and second connecting assemblies to cooperate to draw the first and second portions axially towards each other (C. 4, L. 45-55). The first and second connecting assemblies cooperating so that the first and second circumferentially facing surfaces confront each other with the first and second tubular elements in the second relative rotational position to thereby block relative movement of the first and second tubular elements from the second relative rotational position back into the first relative rotational position (C. 4, L. 55-67).

One of the first and second connecting assemblies comprises a first radially extending projection (pins not shown as per C. 4, L. 45-65) and the other of the first and second connecting assemblies has a first groove (33) in which the first projection

guidingly moves as the first and second tubular elements are changed between the first and second relative rotational positions (C. 4, L. 45-65).

The first portion has a first radially outwardly extending projection (pins not shown as per C. 4, L. 45-65) and the second portion has a first groove (33) in which the first projection guidingly moves as the first and second tubular elements are changed between the first and second relative rotational positions (C. 4, L. 45-65).

The second portion has a first radially inwardly extending projection (33aa) which extends into the first groove and as the first and second tubular elements are changed from the first relative rotational position into the second relative rotational the first radially outwardly extending projection and first radially inwardly extending projection interact so that at least one of a) the first radially outwardly extending projection deforms radially inwardly and b) the first radially inwardly extending projection deforms radially outwardly to allow the first radially outwardly extending projection and first radially inwardly extending projection to move past each other in a circumferential direction to thereby allow the first and second circumferential facing surfaces to confront each other (C. 4, L. 45-65).

The first portion has a second radially outwardly extending projection (pins not shown as per C. 4, L. 45-65) and the second projection has a second groove (33) in which the second radially outwardly extending projection guidingly moves as the first and second tubular elements are changed between the first and second relative rotational positions (C. 4, L. 45-65).

The first and second radially outwardly extending projections are at substantially diametrically opposite locations on the first portion (just as the grooves are).

The first and second radially outwardly extending projections are at substantially the same circumferential location on the first portion (just as the grooves are).

The radially outwardly facing surfaces on the first tubular element and radially inwardly facing surface on the second tubular element are relatively dimensioned so that the radially outwardly facing surface and radially inwardly facing surface are urged against each other with a frictional force (when the pin is over 33aa) that is greater with the first and second tubular elements in the second relative rotational position (before the pin goes over 33aa) than with the first and second tubular elements in the first relative rotational position.

One of the first and second tubular elements (21) has a fitting for connection to a fluid blower (Fig. 1).

The combination is further combined with a fluid blower to which the fitting is connected so that fluid propelled by the fluid blower is directed through the first and second tubular elements (Fig. 1).

A method of joining first and second tubular elements (21,31) comprises the steps of: a) providing a first tubular element (21) having a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (pins not shown as per C. 4, L. 45-65); b) providing a second tubular element (31) having a second axis, a second portion with a radially inwardly facing surface, and a second connecting assembly (33); c) aligning the first and second tubular elements in a preassembly state

Art Unit: 3677

with the first and second axes substantially coincident and the first portion adjacent to the second portion (when pin is ready to enter 33); d) relatively axially moving the first and second tubular elements from the preassembly state towards each other into a first relative axial position and with the first and second tubular elements in the first relative axial position, relatively moving the first and second tubular elements around the first and second axes from a first relative rotational position into a second relative rotational position and thereby causing the first and second connecting assemblies to cooperate so as to draw the first and second portions axially towards each other with the first and second tubular elements in a second relative axial position (C. 4, L. 45-65), wherein a frictional force generated between the first and the second portions is greater than with the first and second tubular elements in the first relative axial position (through the engagement of the pins with 33aa). The step of causing the first and second connecting assemblies to cooperate comprises causing the first and second connecting assemblies to cooperate to releasably block the first and second tubular elements in the second relative rotational position (through the engagement of the pins with 33aa).

The step of causing the first and second connecting assemblies to cooperate to cooperatively releasably block the first and second tubular elements in the second relative position comprises causing circumferentially facing surfaces on the first and second connecting assemblies to confront each other (C. 4, L. 45-65).

The step of causing the first and second connecting assemblies to cooperate comprises causing a projection (pins not shown) on one of the first and second

connecting assemblies to move in a groove (33) with an axial rise on the other of the first and second connecting assemblies (C. 4, L. 45-65).

The step of causing the first and second connecting assemblies to cooperate comprises causing a plurality of projections (pins not shown) to interact one each with a plurality of grooves (33) each with an axial rise (C. 4, L. 45-65).

The method further comprises the step of operatively connecting the tubular element to a fluid blower (10) so that fluid propelled by the fluid blower is directed through the joined first and second tubular elements (Fig. 1).

5. Claims 1-3 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Gilbert (US 1,951,754).

In combination, a first tubular element and (27) a second tubular element (15). The first tubular element has a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (28) at a first circumferentially facing surface. The second tubular element has a second portion with a second axis, a radially inwardly facing surface and a second connecting assembly (23) with a second circumferentially facing surface. The first portion extends within the second portion so that the radially inwardly facing surface on the second tubular element surrounds the radially outwardly facing surface on the first tubular element (Figs. 1, 2 and 6). The first and second tubular elements positionable in a first relative axial position wherein relative movement of the first and second tubular elements around the first and second axes between a first relative rotational position and a second relative rotational position causes the first and second connecting assemblies to cooperate to draw the first and second portions



axially towards each other (Figs. 2 and 6). The first and second connecting assemblies cooperating so that the first and second circumferentially facing surfaces confront each other with the first and second tubular elements in the second relative rotational position to thereby block relative movement of the first and second tubular elements from the second relative rotational position back into the first relative rotational position (Figs. 2 and 6).

One of the first and second connecting assemblies comprises a first radially extending projection (28) and the other of the first and second connecting assemblies has a first groove (23) in which the first projection guidingly moves as the first and second tubular elements are changed between the first and second relative rotational positions (Figs. 2 and 6).

The first portion has a first radially outwardly extending projection (28) and the second portion has a first groove (23) in which the first projection guidingly moves as the first and second tubular elements are changed between the first and second relative rotational positions (Figs. 2 and 6).

The first and second tubular elements are positionable in a second relative axial position (hatch lines in Fig. 2) wherein relative movement of the first and second tubular elements from the first relative rotational position into the second relative rotational position causes the first and second connecting assemblies to draw the first and second portions axially towards each other further than with the first and second tubular elements in the first relative axial position and the first and second tubular elements

moved from the first relative rotational position (regular lines) into the second relative rotational position (hatch lines).

The second portion has a second groove (23) in which the first projection guidingly moves as the first and second tubular elements are moved from the first relative rotations position into the second relative rotational position with the first and second tubular elements in the second relative axial position (regular lines and hatch lines of Fig. 2).

The first groove has a first axial rise and the second groove has a second axial rise and the first and second rise are approximately equal (Fig. 2).

The second tubular element has an axially extending entry groove (next to 23) that is contiguous with the first and second grooves.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al.

Nishimura discloses the combination of the first tubular member with the second tubular member and the connection between the tubular members in accordance to

claim 1 as recited above in paragraph 3. Nishimura discloses the use of projections as part of the connection but fails to disclose the shape of the first radially outwardly extending projection. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the first radially outwardly extending projection having an elongate shape with a length. The use of elongated shaped with a length is well known in the art at the time the invention was made and such a projection will correspond to the elongated shape of the end of the groove 33.

In accordance with the modification made for claim 15 above, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to have the length of the first radially outwardly extending projection being directed in a circumferential direction at an angle to a plane orthogonal to the second axis since the end of the groove extends at an angle to a plane orthogonal to the second axis.

Nishimura also discloses that the second tubular portion is made out of plastic (C. 5, L. 6-12). Nishimura fails to disclose that both tubular portions are made out of plastic. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the first and second portions comprised of a flexible plastic material by making the first tubular member out of the same plastic material as the second tubular member since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 135 USPQ 416.

***Allowable Subject Matter***

8. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gilbert (US 1,951,754), Pietro (US 4,911,573), Haynes (US 6,447,021 B1) and Ray et al. (US 6,811,190 B1) are cited to show state of the art with respect to telescoping mechanism having a connection means similar to the one being claimed by the current application.

Nishimura et al. (US 5,926,910) and Vesser (US 6,108,865) are cited to show state of the art with respect to fluid blower having a connection means similar to the one being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (703) 308-1881. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (703) 306-4115.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase the patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as PTO's mailroom processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP § 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee that the applicant is paying by check **should not be** submitted by facsimile transmission separately from the check.

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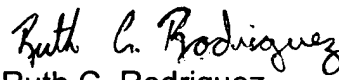
If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP

Art Unit: 3677

§ 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response has been transmitted by facsimile will cause further unnecessary delays in the processing of your application, duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ruth C. Rodriguez  
Patent Examiner  
Art Unit 3677

rcr  
February 22, 2005